

## Learning Scale

<b>Course:</b>	<b>Biology</b>	<b>Quarter:</b>	<b>3</b>
<b>Content Standard:</b>	<b>5a, 5b, 1d, 4a, 4b, 4e, 4c</b>		
<b>Unit of Study:</b>	<b>Protein Synthesis</b>		
<b>Topic:</b>	<b>Protein Synthesis project</b>		
<b>EMS</b>			
<b>SWBAT show understanding of Replication, Transcription, and Translation that includes descriptions and illustrations of structures, locations, and steps.</b>			
Score	Description	Learning Goal	
<b>5</b>	In addition to exhibiting level-4 performance, in-depth inferences and applications that go BEYOND what was taught in class.	(Level 5 Learning Goal is Optional)  - describes and show an example of how mutations may or may not affect amino acids sequence or the gene expressed. - explain the process and result of mRNA processing	
<b>4</b> <b>Target Goal</b>	<b>No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught.</b>	In addition to level 3:  --provide illustrations of DNA, RNA, proteins structures, nucleus, cytoplasm with details and labels  -describe the steps of Replication, Transcription, and Translation (a page for each process) -an organized order is seen in the booklet: has a cover page, an Introduction, the 3 processes, and conclusion that summarizes what Protein Synthesis is all about.	
<b>3</b>	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more COMPLEX ideas and processes.	-includes terms: DNA, RNA, proteins, double helix, hydrogen bond, covalent bond, DNA replication, nucleus, semiconservative replication, template, base pairing rule, DNA polymerase, helicase, replication fork, transcription, RNA polymerase, translation, codon, anticodon, mRNA, tRNA, rRNA, ribosome, peptide bond, polypeptide, amino acid, cytoplasm  -provide illustrations of DNA, RNA, proteins structures, nucleus, cytoplasm -lists out basic steps of Replication, Transcription, and Translation (a page for each process) -an organized order is seen in the booklet: has an Introduction the 3 processes	
<b>2</b>	With HELP, a partial knowledge of some of the simpler and complex details and processes (score 3 & 4).		
<b>1</b>	Even with help, no understanding or skill demonstrated.		

Garden Grove Unified School District  
Office of Secondary Education  
Department of 7-12 Instruction

It is appropriate to include *sample* math problems or vocabulary in a learning goal to clarify intent, however it is not appropriate to include specific strategies (ie. a particular thinking map, CM tool, type of assessment, etc.).